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Teaching mathematical subjects to students with musculoskeletal disabilities: Public and peer discussions

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Abstract

© Authors. The Russian and international legislation ensure equal educational rights to all people regardless of whether have a disability or not. However, traditional approaches to organization of educational activities often do not provide a high enough level of education (including higher education) for people with disabilities as they do not take into account their special needs. This significantly narrows down the scope of professional options for people with disabilities. Mathematical disciplines are among the most difficult to master which means that if people with disabilities are not provided with specific support it might cut them off from professional fields that require mathematical competence. This determines the relevance and importance of the present study. The main objective of our research is to identify features of effective teaching of mathematical subjects to bachelor students with disabilities. We specifically focus on the group of students with musculoskeletal disabilities as this type of disabilities is one of the most common. The main research method is expert assessment of teaching practices (within mathematical subjects) and evaluation of influential factors, effectiveness indicators and resources. Representatives of public organizations, ministries, psychologists (that specifically specialize in working with people with disabilities), representatives of higher education, employers and HR managers - all in all 95 people took part in the experiment.

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Keywords

Bachelor engineering programs, Higher education, Inclusive education, Musculoskeletal disabilities, Teaching mathematics

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